



**west virginia** department of environmental protection

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**ENGINEERING EVALUATION / FACT SHEET**

**BACKGROUND INFORMATION**

Application No.: R13-3079  
Plant ID No.: 051-00152  
Applicant: Williams Ohio Valley Midstream LLC (Williams)  
Facility Name: Lucey Compressor Station  
Location: Cameron, Marshall County  
SIC Code: 1389  
NAICS Code: 213112  
Application Type: Construction  
Received Date: May 13, 2013  
Engineer Assigned: Jerry Williams, P.E.  
Fee Amount: \$2,000.00  
Date Received: May 13, 2013  
Complete Date: June 13, 2013  
Due Date: September 11, 2013  
Applicant Ad Date: May 13, 2013  
Newspaper: *Moundsville Daily Echo*  
UTM's: Easting: 532.306 km      Northing: 4,411.146 km      Zone: 17  
Description: "After the Fact" permit application to operate a natural gas compressor station.

**PROJECT OVERVIEW**

Williams submitted an "after the fact" permit application to operate a natural gas compressor station located approximately 7.2 miles south of Moundsville in Marshall County. The facility will receive natural gas from local production wells that compress and dehydrate the gas for delivery to a gathering pipeline. The following equipment will be present at the facility:

- One (1) 670 hp Caterpillar G3508LE natural gas fired compressor engine (CE-01) controlled with an Oxidation Catalyst
- One (1) 5.0 million standard cubic feet per day (mmscfd) triethylene glycol (TEG) dehydrator (RSV-1)
- One (1) 0.20 million British Thermal Units per hour (MMBTU/hr) natural gas fired reboiler (RBV-1)
- Fugitive emissions from process piping and equipment

## DESCRIPTION OF PROCESS

The following process description was taken from Permit Application R13-3079:

### *Compressor Engine*

One (1) natural gas fired compressor engine (CE-01) will be utilized at the facility. The engine is equipped with an oxidation catalyst to control pollutant emissions.

- Carbon Monoxide (CO)
- Volatile Organic Compounds (VOC)
- Hazardous Air Pollutants (HAP)

### *Dehydrator*

One (1) TEG dehydrator (RSV-1) and associated reboiler (RBV-1) will be utilized at the facility. The dehydrator is used to remove water vapor from the inlet wet gas stream to meet pipeline specifications. In the dehydration process, the wet inlet gas stream flows through a contactor tower where the gas is contacted with lean glycol. The lean glycol absorbs the water in the gas stream and becomes rich glycol laden with water and trace amounts of hydrocarbons. The rich glycol is then routed to a flash tank where the glycol pressure is reduced to liberate the lighter end hydrocarbons. The lighter end hydrocarbons are routed from the flash tank for use as reboiler fuel. The rich glycol is then sent from the flash tank to the regenerator where the glycol is heated to drive off the water vapor, creating lean glycol for reuse in the process.

### *Startup, Shutdown and Maintenance (SSM)*

During routine operation of the facility, the compressor engine will undergo periods of startup and shutdown. Often when the engine is shutdown, the natural gas contained within the compressor and associated piping is vented to the atmosphere. Additionally, there will be other infrequent emissions from various maintenance activities at the facility that are not necessarily associated with compressor blowdowns (e.g. pig launching). These emissions are associated with SSM.

## SITE INSPECTION

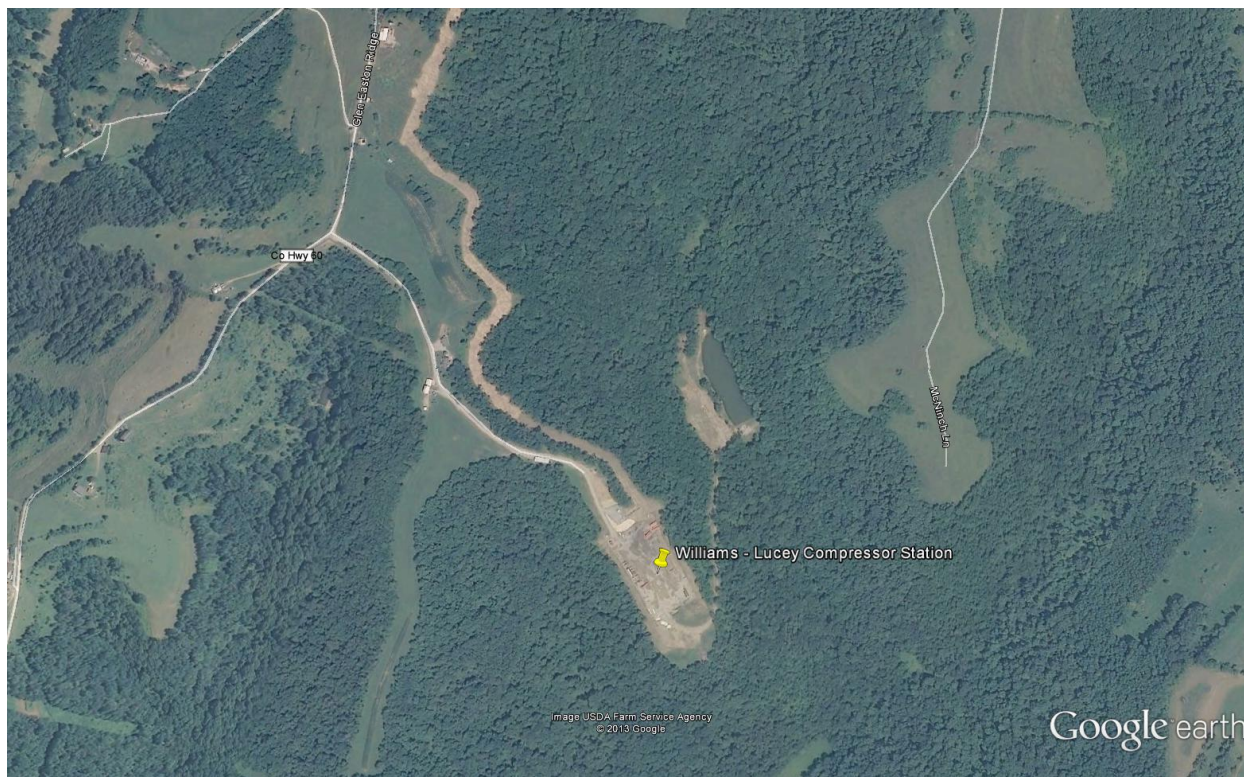
A site inspection was conducted by Michael Wade of the NPRO DAQ Enforcement Section on June 4, 2013. The writer did not see any problems with locating the facility at the proposed site. The closest residence is approximately 1,300 feet away.

Latitude: 39.849719

Longitude: -80.622358

Directions as given in the permit application are as follows:

*From Moundsville: Start on Lafayette Avenue (WV Highway 2) and go east on 12<sup>th</sup> Street (County Highway 17) for approximately 1.0 mile. Turn left onto Fork Ridge Road (County Highway 17) and go approximately 1.4 miles. Turn left to stay on Fork Ridge Road (County Highway 17) and go approximately 7.2 miles. Take a slight right onto Glen Easton Road (County Highway 60) and go approximately 0.8 miles. Turn left onto access road for approximately 0.4 miles to site.*



## ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Emissions associated with this construction application consist of the combustion emissions from one (1) natural gas fired compressor engine (1E), one (1) TEG dehydrator still vent (2E), one TEG dehydrator reboiler (3E), SSM emissions (4E), and fugitive piping emissions (5E). Fugitive emissions for the facility are based on calculation methodologies presented in EPA Protocol for Equipment Leak Emission Estimates. The following table indicates which methodology was used in the emissions determination:

Emission Point ID#	Process Equipment	Calculation Methodology
1E	670 hp Caterpillar G3508LE Reciprocating Internal Combustion Engine (RICE) w/ Ox Cat	Manufacturer's Data, EPA AP-42 Emission Factors
2E	5.0 mmscf TEG Dehydrator Still Vent (Recycled Emissions to Reboiler)	GRI-GlyCalc 4.0
3E	0.20 MMBtu/hr TEG Dehydrator Reboiler	EPA AP-42 Emission Factors
4E	SSM Emissions	Engineering Estimate
5E	Process Piping Fugitive Emissions	EPA AP-42 Emission Factors

The following table indicates the control device efficiencies that are required for this facility:

Emission Unit	Pollutant	Control Device	Control Efficiency
670 hp Caterpillar G3508LE RICE w/ Ox Cat (1E)	Carbon Monoxide	Oxidation Catalyst	93 %
	Volatile Organic Compounds		50 %
	Formaldehyde		76 %
5.0 mmscf TEG Dehydrator Still Vent (3E)	Volatile Organic Compounds	Recycled Reboiler / Condenser	Varies by Pollutant
	Hazardous Air Pollutants		

The total facility PTE for the Lucey Compressor Station is shown in the following table:

Pollutant	Facility Wide PTE (tons/year)
Nitrogen Oxides	13.04
Carbon Monoxide	0.92
Volatile Organic Compounds	33.36
Particulate Matter-10	0.26
Sulfur Dioxide	0.01
Formaldehyde	0.28
Total HAPs	10.30
Carbon Dioxide Equivalent	4,537

Maximum detailed controlled point source emissions were calculated by Williams and checked for accuracy by the writer and are summarized in the table on the next page. In regards to greenhouse gases (GHG), the Carbon Dioxide Equivalent (CO<sub>2</sub>e) emissions were based on manufacturer's data for the engine (1E) and EPA emission factors for the reboiler, SSM, and fugitive emissions.

## Williams Ohio Valley Midstream, LLC – Lucey Compressor Station (R13-3079)

Emission	Source	NO <sub>x</sub>		CO		VOC		PM		SO <sub>2</sub>		Formaldehyde		Total HAPs		CO <sub>2</sub> e	
Point ID#		lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year	lb/hr	ton/year
1E	Compressor Engine #1	2.95	12.94	0.19	0.84	0.29	1.25	0.06	0.25	<0.01	0.01	0.06	0.28	0.12	0.52	772	3,380
2E	Dehydrator Still Vent	0	0	0	0	5.56	24.34	0	0	0	0	0	0	2.11	9.23	111	484
3E	Dehydrator Reboiler	0.02	0.1	0.02	0.08	<0.01	0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	26	114
4E	Startup, Shutdown, Maintenance	0	0	0	0	NA	3.79	0	0	0	0	0	0	NA	0.23	NA	225
5E	Process Piping Fugitives	0	0	0	0	0.91	3.97	0	0	0	0	0	0	0.07	0.32	76	334
<b>Total</b>	<b>Total Facility PTE</b>	<b>2.97</b>	<b>13.04</b>	<b>0.21</b>	<b>0.92</b>	<b>6.76</b>	<b>33.36</b>	<b>0.06</b>	<b>0.26</b>	<b>&lt;0.01</b>	<b>0.01</b>	<b>0.06</b>	<b>0.28</b>	<b>2.30</b>	<b>10.30</b>	<b>985</b>	<b>4537</b>

## REGULATORY APPLICABILITY

The following rules apply to the facility:

### **45CSR2** (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)

The purpose of 45CSR2 is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units. 45CSR2 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the proposed reboiler (RBV-1) is below 10 MMBTU/hr. Therefore, this unit is exempt from the aforementioned sections of 45CSR2.

Williams would also be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average.

### **45CSR4** (To Prevent and Control the Discharge of Air Pollutants into the Open Air which Causes or Contributes to an Objectionable Odor or Odors)

45CSR4 states that an objectionable odor is an odor that is deemed objectionable when in the opinion of a duly authorized representative of the Air Pollution Control Commission (Division of Air Quality), based upon their investigations and complaints, such odor is objectionable. No odors have been deemed objectionable.

### **45CSR10** (To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides)

The purpose of 45CSR10 is to establish emission limitations for sulfur dioxide which are discharged from fuel burning units. 45CSR10 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the proposed reboiler (RBV-1) is below 10 MMBTU/hr. Therefore, this unit is exempt from the aforementioned sections of 45CSR10.

**45CSR13** (Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation)

45CSR13 applies to this source due to the fact that Williams exceeds the regulatory emission threshold for criteria pollutants of 6 lb/hr and 10 ton/year, and they are also subject to a substantive requirement of an emission control rule promulgated by the Secretary (40CFR60 Subparts JJJJ and OOOO).

Williams paid the appropriate application fee and published the required legal advertisement for a construction permit application.

**45CSR16** (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)

45CSR16 applies to this source by reference of 40CFR60, Subparts JJJJ and OOOO. These requirements are discussed under that rule below.

**45CSR22** (Air Quality Management Fee Program)

Williams is not subject to 45CSR30. The Lucey Compressor Station is subject to 40CFR60 Subparts JJJJ and OOOO, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

Williams is required to pay the appropriate annual fees and keep their Certificate to Operate current.

**40CFR60 Subpart JJJJ** (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE))

40CFR60 Subpart JJJJ establishes emission standards for applicable SI ICE.

The 670 hp Caterpillar G3508LE RICE w/ Ox Cat (1E) was manufactured on or after July 1, 2008 and before January 1, 2011.

The 670 hp Caterpillar G3508LE RICE w/ Ox Cat (1E) will be subject to the following emission limits: NO<sub>x</sub> – 2.0 g/hp-hr; CO – 4.0 g/hp-hr; and VOC – 1.0 g/hp-hr. Based on the manufacturer's specifications, the post control emissions for this engine will be: NO<sub>x</sub> – 2.0 g/hp-hr; CO – 0.13 g/hp-hr; VOC – 0.48 g/hp-hr. Therefore, the emission standards will be met.

The 670 hp Caterpillar G3508LE RICE w/ Ox Cat (1E) is not certified by the manufacturer to meet the emission standards listed in 40CFR60 Subpart JJJJ. Therefore, Williams will be required to conduct an initial performance test, keep a maintenance plan and records of conducted maintenance, and maintain and operate the engine to minimize emissions.



**40CFR60 Subpart OOOO** (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution)

EPA published in the Federal Register new source performance standards (NSPS) and air toxics rules for the oil and gas sector on August 16, 2012. 40CFR60 Subpart OOOO establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO<sub>2</sub>) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011. The following affected sources which commence construction, modification or reconstruction after August 23, 2011 are subject to the applicable provisions of this subpart:

- a. Each gas well affected facility, which is a single natural gas well.

*There are no gas wells at this facility. Therefore, all requirements regarding gas well affected facilities under 40 CFR 60 Subpart OOOO would not apply.*

- b. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your centrifugal compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

*There are no centrifugal compressors at the Lucey Compressor Station. Therefore, all requirements regarding centrifugal compressors under 40 CFR 60 Subpart OOOO would not apply.*

- c. Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. For the purposes of this subpart, your reciprocating compressor is considered to have commenced construction on the date the compressor is installed (excluding relocation) at the facility. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

*There is one (1) applicable reciprocating internal combustion engine located at the Lucey Compressor Station that was constructed after August 23, 2011. Therefore, the requirements regarding reciprocating compressors under 40 CFR 60 Subpart OOOO would apply. Williams would be required to perform the following:*

- Replace the reciprocating compressor rod packing at least every 26,000 hours of operation or 36 months.

- Demonstrate initial compliance by continuously monitoring the number of hours of operation or track the number of months since the last rod packing replacement.
- Submit the appropriate start up notifications.
- Submit the initial annual report for the reciprocating compressors.
- Maintain records of hours of operation since last rod packing replacement, records of the date and time of each rod packing replacement, and records of deviations in cases where the reciprocating compressor was not operated in compliance.

d. Pneumatic Controllers

- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 scfh which commenced construction after August 23, 2011, and is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not located at a natural gas processing plant.
- Each pneumatic controller affected facility, which is a single continuous bleed natural gas-driven pneumatic controller which commenced construction after August 23, 2011, and is located at a natural gas processing plant.

*There are no applicable pneumatic controllers with natural gas bleed rates greater than 6 scfh which commenced construction after August 23, 2011. Therefore, all requirements regarding applicable pneumatic controllers under 40 CFR 60 Subpart OOOO would not apply.*

e. Each storage vessel affected facility, which is a single storage vessel, located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment.

40CFR60 Subpart OOOO defines a storage vessel as a unit that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provides structural support and is designed to contain an accumulation of liquids or other materials. The following are not considered storage vessels:

- Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If the source does not keep or are not able to produce records, as required by §60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180

consecutive days, the vessel described herein is considered to be a storage vessel since the original vessel was first located at the site.

- Process vessels such as surge control vessels, bottoms receivers or knockout vessels.
- Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

This rule requires that the permittee determine the VOC emission rate for each storage vessel affected facility utilizing a generally accepted model or calculation methodology within 30 days of startup, and minimize emissions to the extent practicable during the 30 day period using good engineering practices. For each storage vessel affected facility that emits more than 6 tpy of VOC, the permittee must reduce VOC emissions by 95% or greater within 60 days of startup. The compliance date for applicable storage vessels is October 15, 2013.

*There are no storage vessels located at the Lucey Compressor Station. Therefore, all requirements regarding storage vessels under 40 CFR 60 Subpart OOOO would not apply.*

- f. The group of all equipment, except compressors, within a process unit is an affected facility.
- Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
  - Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§60.5400, 60.5401, 60.5402, 60.5421 and 60.5422 of this subpart.
  - The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts VVa, GGG or GGGa of this part.

*The Lucey Compressor Station is not a natural gas processing plant. Therefore, Leak Detection and Repair (LDAR) requirements for onshore natural gas processing plants would not apply.*

- g. Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.
- Each sweetening unit that processes natural gas is an affected facility; and
  - Each sweetening unit that processes natural gas followed by a sulfur recovery unit is an affected facility.
  - Facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H<sub>2</sub>S) in the acid gas (expressed as sulfur) are required to comply with recordkeeping and reporting requirements specified in §60.5423(c) but are not required to comply with §§60.5405 through 60.5407 and paragraphs 60.5410(g) and 60.5415(g) of this subpart.
  - Sweetening facilities producing acid gas that is completely reinjected into oil-or-gas-bearing geologic strata or that is otherwise not released to the atmosphere are not subject to §§60.5405 through 60.5407, 60.5410(g), 60.5415(g), and 60.5423 of this subpart.

*There are no sweetening units at the Lucey Compressor Station. Therefore, all requirements regarding sweetening units under 40 CFR 60 Subpart OOOO would not apply.*

**40CFR63 Subpart HH** (National Emission Standards for Hazardous Air Pollutants for Oil and Natural Gas Production Facilities)

Subpart HH establishes national emission limitations and operating limitations for HAPs emitted from oil and natural gas production facilities located at major and area sources of HAP emissions. The glycol dehydration unit at the Hunter-Pethel Compressor Station is subject to the area source requirements for glycol dehydration units. However, because the facility is an area source of HAP emissions and the actual average benzene emissions from the glycol dehydration unit is below 0.90 megagram per year (1.0 tons/year) it is exempt from all requirements of Subpart HH except to maintain records of actual average flowrate of natural gas to demonstrate a continuous exemption status.

**40CFR63 Subpart ZZZZ** (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines)

Subpart ZZZZ establishes national emission limitations and operating limitations for HAPs emitted from stationary RICE located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations. The engine (1E) at the Lucey Compressor Station is subject to the area source requirements for non-emergency spark ignition engines.

The applicability requirements for a new stationary RICE located at an area source of HAPs, is the requirement to meet the standards of 40CFR60 Subpart JJJJ. These requirements were outlined above. The proposed engine meets these standards.

Because these engines will not be certified by the manufacturer, Williams will be required to perform an initial performance test within 180 days from startup, and subsequent testing every 8,760 hours or 3 years, whichever comes first.

The following rules do not apply to the facility:

**45CSR30** (Requirements for Operating Permits)

Williams is not subject to 45CSR30. The Lucey Compressor Station is subject to 40CFR60 Subparts JJJJ and OOOO, however they are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided they are not required to obtain a permit for a reason other than their status as an area source.

**40CFR60 Subpart Kb** (Standards of Performance for Volatile Organic Liquid Storage Vessels)

40CFR60 Subpart Kb does not apply to storage vessels with a capacity less than 75 cubic meters. According to Williams, there will be storage tanks installed at the Lucey Compressor Station. Therefore, Williams would not be subject to this rule.

**40CFR60 Subpart KKK** (Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants)

40CFR60 Subpart KKK applies to onshore natural gas processing plants that commenced construction after January 20, 1984, and on or Before August 23, 2011. The Lucey Compressor Station is not a natural gas processing facility, therefore, Williams is not subject to this rule.

**45CSR14** (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants)

**45CSR19** (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment)

The Lucey Compressor Station is located in Marshall County, which is a non-attainment county for PM<sub>2.5</sub> (surrogate for NO<sub>x</sub> and SO<sub>2</sub>), therefore it is possibly subject to 45CSR19.

As shown in the following table, Williams is not subject to 45CSR14 or 45CSR19 review.

<b>Pollutant</b>	<b>PSD (45CSR14) Threshold (tpy)</b>	<b>NANSR (45CSR19) Threshold (tpy)</b>	<b>Lucey PTE (tpy)</b>	<b>45CSR14 or 45CSR19 Review Required?</b>
Carbon Monoxide	250	NA	0.92	No
Nitrogen Oxides	250	100	13.04	No
Sulfur Dioxide	250	100	0.01	No
Particulate Matter 10	250	100	0.26	No
Ozone (VOC)	250	NA	33.36	No
Greenhouse Gas	100,000	NA	4,537	No

### TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

There will be small amounts of various non-criteria regulated pollutants emitted from the combustion of natural gas. However, due to the concentrations emitted, detailed toxicological information is not included in this evaluation.

### AIR QUALITY IMPACT ANALYSIS

Modeling was not required of this source due to the fact that the facility is not subject to 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants) or 45CSR19 (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment) as seen in the table listed in the Regulatory Discussion section under 45CSR14/45CSR19.

### SOURCE AGGREGATION DETERMINATION

“Building, structure, facility, or installation” is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

1. The Lucey Compressor Station will operate under SIC code 1389 (Oil and Gas Field Services, Not Classified Elsewhere). The upstream gas production wells will operate under SIC code 1311 (Crude Petroleum and Natural Gas). Therefore, both share the same two-digit major SIC code of 13. Therefore, the Lucey Compressor Station does share the same two (2) digit major SIC code as the upstream gas production wells.
2. Williams operates under their parent company, The Williams Companies, Inc. and is the sole operator of the Lucey Compressor Station. The production wells that send natural gas to the Lucey Compressor Station are owned and operated by Trans Energy, Inc. Williams has no ownership stake in any production well that may send natural gas to the Lucey Compressor Station. In addition, no work forces are shared between the two (2) companies. All employees at the Lucey Compressor Station are under the exclusive direction of Williams and have no reporting authority to any other entity. Employees of the production well owners have no shared reporting authority and the companies operate

independently of one another. As commercial opportunities are identified, the Lucey Compressor Station will potentially receive gas from other producers in the future. The producers are and will be responsible for any decisions to produce or shut-in wellhead facilities and no control over the equipment installed, owned, and operated by Williams. Therefore, these facilities are not under common control.

3. The Lucey Compressor Station is not located on contiguous or adjacent properties with any other Williams owned facility. There are no other Williams facilities located within 0.5 miles of the Lucey Compressor Station

The Lucey Compressor Station and Trans Energy, Inc. wells share the same industrial grouping. However, the two (2) facilities are not located on contiguous or adjacent properties, and are not under common control. Therefore, the emissions from these two (2) facilities should not be aggregated in determining major source or PSD status.

### MONITORING OF OPERATIONS

Williams will be required to perform the following monitoring and recordkeeping:

- Monitor and record quantity of natural gas consumed and hours of operation for all combustion sources.
- Maintain records of testing conducted in accordance with the permit. Said records shall be maintained on-site or in a readily accessible off-site location
- Maintain the corresponding records specified by the on-going monitoring requirements of and testing requirements of the permit.
- Maintain records of the visible emission opacity tests conducted per the permit.
- Maintain a record of all potential to emit (PTE) HAP calculations for the entire facility. These records shall include the natural gas compressor engine and ancillary equipment.
- Maintain records of all applicable requirements of 40CFR60 Subparts JJJJ and OOOO.
- The records shall be maintained on site or in a readily available off-site location maintained by Williams for a period of five (5) years.

### RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that Williams meets all the requirements of applicable regulations. Therefore, impact on the surrounding area should be minimized and it is recommended that the Lucey Compressor Station should be granted a 45CSR13 construction permit for their facility.

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Jerry Williams, P.E.  
Engineer

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Date